BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

In the matter of the amendment of ARM 17.8.504, 17.8.505, 17.8.744, and 17.8.1204 and the adoption of new rules I through IX pertaining to establishing a registration system for certain facilities that presently require an air quality permit	NOTICE OF AMENDMENT AND ADOPTION (AIR QUALITY)

TO: All Concerned Persons

1. On December 22, 2005, the Board of Environmental Review published MAR Notice No. 17-238 regarding a notice of public hearing on the proposed amendment and adoption of the above-stated rules at page 2513, 2005 Montana Administrative Register, issue number 24.

2. The board has not adopted the proposed amendment to ARM 17.8.1204. The board has amended ARM 17.8.504, 17.8.505, and 17.8.744, and adopted New Rules IV (17.8.1704) and VIII (17.8.1712) exactly as proposed, and has adopted New Rules I (17.8.1701), II (17.8.1702) III (17.8.1703), V (17.8.1705), VI (17.8.1710), VII (17.8.1711) and IX (17.8.1713) as proposed, but with the following changes, new matter underlined, stricken matter interlined:

NEW RULE I (17.8.1701) DEFINITIONS For the purposes of this subchapter:

(1) through (1)(b) remain as proposed.

(2) "Potential to emit (PTE)" means the maximum capacity of a facility or emitting unit, within physical and operational design, to emit a pollutant. Any physical or operational limitation on the capacity of the facility or emitting unit to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, is treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions are not considered in determining potential to emit.

(3) and (4) remain as proposed.

(5) "Registration eligible facility" means an oil or gas well facility as defined in 75-2-103(13), MCA, and subject to the requirements of ARM 17.8.743.

(6) "VOC piping components" means valves, pumps, compressors, flanges, pressure relief valves and connectors, and other piping components that have VOC emissions.

NEW RULE II (17.8.1702) APPLICABILITY (1) remains as proposed.

(2) The owner or operator of an oil or gas well facility subject to the requirements of ARM Title 17, chapter 8, subchapter 12, is not eligible to register under this subchapter.

NEW RULE III (17.8.1703) REGISTRATION PROCESS AND INFORMATION (1) through (2)(i) remain as proposed.

(3) The owner or operator shall provide the following additional equipment-specific information to the department for each emitting unit, including any air pollution control equipment:

(a) and (b) remain as proposed.

~~(c) serial number;~~

(d) and (e) remain as proposed, but are renumbered (c) and (d).

(4) through (7) remain as proposed.

NEW RULE V (17.8.1705) OPERATING REQUIREMENTS: FACILITY-WIDE (1) and (2) remain as proposed.

(3) The owner or operator of a registered facility shall maintain onsite records showing daily hours of operation and daily production rates and corresponding emission levels for the previous 12 months. The records compiled in accordance with this subchapter must be maintained by the owner or operator for at least five years following the date of the measurement, must be available at the plant site, unless otherwise specified in this subchapter, for inspection by the department, and must be submitted to the department upon request.

NEW RULE VI (17.8.1710) OIL OR GAS WELL FACILITIES GENERAL REQUIREMENTS (1) The owner or operator of ~~an~~ a registration eligible oil or gas well facility may submit to the department a complete registration form, pursuant to ARM 17.8.1701 through 17.8.1705, within 60 days after the initial well completion date for the facility.

(2) The owner or operator of an oil or gas well facility ~~shall limit production, hours of operation and/or fuel consumption such that the facility's potential to emit is less than 100 tons per year (tpy) of any airborne pollutant that is regulated under this chapter, less than 10 tpy of any individual hazardous air pollutant (HAP), and less than 25 tpy of any combination of HAPs. The facility limitations are 12-month rolling limits, calculated monthly~~ who submits an application for a Montana air quality permit to the department prior to the effective date of this subchapter may request that the application be used in lieu of a registration form for registration of the oil or gas well facility by completing the form provided by the department.

(3) ~~The owner or operator of an oil or gas well facility who submits an application for a Montana air quality permit to the department by January 3, 2006, may request that the application be used in lieu of a registration form for registration of the oil or gas well facility by completing the department request form.~~ The owner or operator of a registered oil or gas well facility shall operate all emissions control equipment to provide the maximum air pollution control for which it was designed.

NEW RULE VII (17.8.1711) OIL OR GAS WELL FACILITIES EMISSION CONTROL REQUIREMENTS (1) The owner or operator of a registered oil or gas well facility shall install and operate the following air pollution control equipment and comply with the following air pollution control practices beginning at the time of registration:

(a) ~~volatile organic compound (VOC) vapors greater than 500 British thermal units per standard cubic foot (BTU/scf) from oil or gas wellhead equipment, oil and condensate storage tanks, or loading transport vehicles, with a PTE greater than 15 tpy, must be captured and routed to a gas pipeline if a gas pipeline is located within one-half mile of the oil or gas well facility;~~ VOC vapors of 200 Btu/scf or greater from each piece of oil or gas well facility equipment, with a PTE greater than 15 tpy, must be captured and routed to a gas pipeline, routed to a smokeless combustion device equipped with an electronic ignition device or a continuous burning pilot system, meeting the requirements of 40 CFR 60.18, and operating at a 95% or greater control efficiency, or routed to air pollution control equipment with equal or greater control efficiency than a smokeless combustion device. The phrase "oil or gas well facility equipment" includes, but is not limited to, wellhead assemblies, amine units, prime mover engines, phase separators, heater treatment units, dehydrator units, tanks, and connecting tubing, but does not include equipment such as compressor engines used for transmission of oil or natural gas;

~~(b) VOC vapors greater than 500 BTU/scf from oil and gas wellhead equipment, oil and condensate storage tanks, or loading transport vehicles, with a PTE greater than 15 tpy and located greater than one-half mile from the oil or gas well facility, must be captured and routed to a gas pipeline, or routed to a smokeless combustion device equipped with an electronic ignition device or a continuous burning pilot system and meeting the requirements of 40 CFR 60.18 or routed to control equipment with equal or greater control efficiency than the smokeless combustion device;~~

~~(c)~~ (b) hydrocarbon liquids must be loaded into, or unloaded from, transport vehicles using submerged fill technology;

(d) and (e) remain as proposed, but are renumbered (c) and (d).

NEW RULE IX (17.8.1713) OIL OR GAS WELL FACILITIES RECORDKEEPING AND REPORTING REQUIREMENTS (1) through (3) remain as proposed.

(4) ~~The owner or operator of an oil or gas well facility shall submit calculations to the department, with the registration form, to verify compliance with [NEW RULE VI(2)].~~ The owner or operator of a registration eligible oil or gas well facility with a detectible level of hydrogen sulfide from the well shall submit, with the registration form, an air quality analysis demonstrating compliance with ARM 17.8.210 and 17.8.214.

~~(5) The owner or operator of an oil or gas well facility shall document, by month, the total production, hours of operation, and/or fuel consumption of the facility. By the 25th day of each month, the owner or operator shall total the production, hours of operation, and/or fuel consumption for the previous month. The monthly information shall be used to determine compliance with the limitation stated in [NEW RULE VI(2)].~~

~~(6) The owner or operator of an oil or gas well facility producing in the Madison (Mississipian), Charles, Ratcliffe, Mission Canyon, Sun River Dolomite, or Duperow (Devonian), or Phosphoria/Tensleep (Permian and Pennsylvanian) geological formations shall submit, with the registration form, an air quality modeling~~

~~analysis demonstrating compliance with ARM 17.8.210 through 17.8.214 and 17.8.220 through 17.8.223.~~

~~(7) The owner or operator of an oil or gas well facility shall certify annually, as required by ARM 17.8.1204(3)(b), that the facility's actual emissions are less than those that would require an air quality Title V operating permit, if the owner or operator has established a limit under [NEW RULE VI(2)]. The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification must be submitted by March 1 and may be submitted with the annual emission inventory information.~~

3. The following comments were received and appear with the board's responses:

COMMENT NO. 1: A commentor stated that the abbreviation "PTE" should follow the phrase "potential to emit" in New Rule I(2).

RESPONSE: The board agrees and has made this revision.

COMMENT NO. 2: Commentors asked the board to review the definition of potential to emit (PTE), because they have strong concerns over the interpretation of PTE as it pertains to oil and gas production and/or wellhead facilities. They stated that their understanding is that PTE will include natural gas product if the product flows through a heater/treater or separator. The commentors stated that a treater or separator is not an emitting unit as it is hard-piped in a closed-loop system with the pipeline on either side of the unit. They stated that no product that passes through the heater/treater or separator is emitted to the atmosphere under normal operations, thus, facilities that, under normal operation, sell gas in a sales pipeline should not be required to consider that gas in the PTE calculation.

RESPONSE: The board has not made any changes to the definition of PTE. The definition is provided and applied consistently throughout the Administrative Rules of Montana (ARM) Title 17, chapter 8, subchapter 7, for all facilities affected by these rules. Thus, PTE is applied to all air contaminant sources and is the basis for the air permitting program. In discussions held with the oil and gas industry during development of the Senate Bill 95 rules, regarding permitting of oil and gas wells, the department determined that clarification was needed in the application of the definition of PTE to oil and gas well facilities. The clarification statement released by the department to help the owners and operators of facilities determine their PTE stated:

> "The Department has determined that oil and gas well production that is routed to the pipeline would not be considered in the Potential to Emit (PTE) calculations. However, those emissions from process equipment (dehydrators, separators, heater treaters, tanks, truck load-out, etc.) and the secondary product recovered from process equipment (regardless of whether the secondary product is routed to a pipeline or not) must be considered in the PTE calculations. The PTE calculations must be made based on no controls and the maximum capacity of the equipment."

The definition of PTE states in part that, "Any physical or operational limitation on the capacity of the facility or emitting unit to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, is treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable." If an owner or operator can accept federally enforceable limitations, such as conditions that require operation of a closed loop system, then these federally enforceable limitations can be taken into account in determining the applicability of other permitting programs such as the Title V Operating Permit and New Source Review programs. Because there is no federally enforceable limit requiring operation in such a manner, the owner or operator cannot take credit for such control or operations in the PTE calculations.

COMMENT NO. 3: A commentor requested clarification on whether two of its operations would be considered to be registration eligible facilities.

RESPONSE: The board did not revise the rules based on this comment. "Oil and gas well facility" is defined in section 75-2-103(13), MCA. An operator who wants a determination on the applicability of this definition to specific facilities may consult with the department.

COMMENT NO. 4: A commentor asked whether additional language is required in ARM 17.8.744 or 17.8.745 to authorize construction of a registration eligible facility. The commentor stated that construction of a facility subject to the department's authority must either be permitted or be specifically excluded from permitting requirements. The commentor stated that registration is required only immediately prior to the commencement of operation of the registration eligible facility, yet, ARM 17.8.744 and ARM 17.8.745 do not specifically allow the commencement of construction of a registration eligible facility.

RESPONSE: The board believes that it's not necessary to clarify when construction may commence. An owner or operator may review section 75-2-211, MCA, to determine when a Montana Air Quality Permit (MAQP) or registration is required. Section 75-2-211(2)(b), MCA, specifically allows 60 days after initial well completion for submission of a permit application to the department, and requirements that are defined in a statute may not unnecessarily be repeated in a rule. Under the amendments to ARM 17.8.744, if a facility is registered, it is exempt from the MAQP requirement.

COMMENT NO. 5: A commentor stated that, in New Rule I(6), the definition of VOC piping components requires clarification to maintain consistency with other regulations for the oil and gas industry because 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS), subpart KKK, for onshore natural gas processing plants, establishes under 60.632(f) that a piece of equipment (component) is not in VOC service if it can be demonstrated that the VOC content reasonably can be expected never to exceed 10.0 percent by weight. The commentor stated that this same distinction should be made in New Rule I(6).

RESPONSE: The board has added a definition of "VOC piping components," for which the rules contain inspection requirements. The board has not specified a

threshold level for VOC emissions because the inspection requirement is intended as an easy check for facilities that still will ensure that a facility is being maintained properly. 40 CFR 60, subpart KKK, specifies a threshold for VOC content by weight, but that regulation also requires more sophisticated testing (leak check instrumentation) than sight, sound, and smell checks. The requirement for sight, sound, and smell checks of facility components is necessary for normal business operations. Therefore, the general definition is appropriately set in relation to the extent of monitoring and testing required for the VOC piping components, as defined in the rules.

COMMENT NO. 6: A commentor stated that New Rule II would require registration of all facilities defined as an "oil and gas well facility," however, the intent is to require registration only of facilities defined as an "oil and gas well facility" and that require a MAQP.

RESPONSE: The board agrees that the intent of the rules is to allow registration of oil and gas well facilities in lieu of applying for a permit, and the board has added language to New Rules I and II to clarify the definition of a registration eligible facility.

COMMENT NO. 7: Commentors requested that the board revise New Rule III(3)(c) to delete the requirement to submit the serial number of equipment being registered. They stated that some equipment is not commercially manufactured and does not have a serial number.

RESPONSE: Serial numbers are not required to be provided with an application for a MAQP. Because the registration process is intended to be comparable to the permitting process, and, because serial numbers are not necessary for purposes of determining compliance with operating requirements, the board agrees with the comment and has deleted the serial number requirement from New Rule III(3)(c).

COMMENT NO. 8: A commentor suggested adding the words "if applicable" to the registration information requirements in New Rule III(3) because some emissions control equipment is manufactured on-site and the equipment-specific information required would not exist.

RESPONSE: The board does not believe that further clarification is necessary in New Rule III(3). The information listed in the rule, other than the serial number requirement discussed above, is required for a permit application or registration, regardless of industry type. There have been situations regarding permit applications where required information is not applicable for various reasons, e.g., when an emitting unit and/or control device is "homemade," in which case the department has required the applicant to identify the maker of the emitting unit and/or control device as the manufacturer. When required information is not available, the department can deal with the issue on a case-by-case basis.

COMMENT NO. 9: Several commentors stated that, in New Rule III(4), which requires notice to the department of any changes to registration information, the phrase "any change(s)" is too broad and could cause confusion. They stated that it's

unclear whether the requirement includes all changes, such as removal of an emitting unit, or like-kind replacement of an emitting unit, or only changes to existing emitting equipment that increase emissions. Commentors suggested revising the phrase to require notice only of "any material change(s)."

RESPONSE: The phrase "any changes" in this rule is intended to have the same meaning as the changes requiring notification under the MAQP process, and the board does not agree that the suggested revision would further clarify the changes that are subject to the notice requirement under the registration process. Because the intent of the registration process is to act in lieu of the permitting process, an owner or operator would not be required to notify the department of changes under the registration rule that do not require notice under the permitting process. The registration process allows the department to stay up-to-date with each facility's operations, yet alleviate the administrative burden under the permitting process of obtaining a modified or amended permit. Both like-kind replacement of an emitting unit and addition of a new emitting unit would require notice to the department.

COMMENT NO. 10: A commentor requested clarification of New Rule V(2), regarding monitoring and recording of annual production information, as to whether "corresponding emission levels for the previous 12 months" needs to be calculated on a daily, monthly, or annual basis. The commentor also asked whether the 12-month period is a rolling or calendar (e.g., January 1 through December 31) period.

RESPONSE: The board does not believe that additional language is needed to clarify New Rule V(2). Production information is necessary for the annual emission inventory, which is used to calculate operating fees. The rule states that production information must be gathered on a "calendar year basis."

COMMENT NO. 11: A commentor requested that the board revise New Rule V(3) to require maintenance of monthly records, instead of daily hours of operation and daily production, and stated that monthly records would be consistent with the records already provided to the Montana Board of Oil and Gas (MBOG).

RESPONSE: New Rule V(3) is a standard requirement that will be required of all registered facilities, to determine emission levels and verify compliance. The owner or operator should know the daily hours of operation and production rates for each facility. The rules do not require reporting of the daily information on an ongoing basis, but allow the department to request the information for a specified time frame to review the compliance status of a facility.

COMMENT NO. 12: Several commentors stated that New Rule V(3) should be revised to allow owners or operators to keep records at a central location rather than on-site at each unmanned facility. They stated that this would be consistent with New Rule IX(1), which requires that records of monthly inspections be maintained onsite or at a central field office.

RESPONSE: New Rule V(3) provides general recordkeeping requirements for all registration eligible facilities, while New Rule IX(1) provides a recordkeeping requirement specific to registered oil or gas well facilities. The board believes the requirement in New Rule IX(1) is appropriate for oil and gas well facilities but that

allowing particular records to be maintained off-site may not be appropriate for all emission source categories that may become eligible for registration in future rulemaking proceedings. The board has revised New Rule V(3) to state that the required records must be kept onsite unless otherwise specified in the subchapter, to allow for different requirements for different emission source categories, as may be appropriate.

COMMENT NO. 13: Commentors requested that the board revise New Rule VI(1) and (2), regarding general requirements for registration, to clarify that only the owner or operator of a registered oil and gas well facility is required to comply with the general requirements.

RESPONSE: The board agrees that the clarification is needed to ensure that the general requirements apply only to registered facilities, and the board has revised New Rule VI and the definition of "registration eligible facility" in New Rule I to clarify that intent.

COMMENT NO. 14: Two commentors requested that the board revise New Rule VI(1), which specifies a deadline of 60 days after well completion to submit a registration, to more accurately reflect industry operations. The requested change would allow registration within 60 days after a well's initial production date. They stated that, in some cases, a well could be completed but not produce for a number of days, therefore, 60 days from well completion may not allow enough time to collect production data that would be sufficiently representative to establish the PTE for the facility.

RESPONSE: The board has not made the suggested revision. Submittal of a permit application within 60 days after initial well completion is required by section 75-2-211(2)(b), MCA, and the intent of the registration rules is to operate in lieu of the permitting process.

COMMENT NO. 15: Commentors requested that the board revise New Rule VI(3), which allows use of a permit application submitted by January 3, 2006, in lieu of a registration form, to allow owners or operators who submit an application between January 3, 2006, and the date that the registration rules become effective to request that the submitted application be used as a registration form. They stated that this would meet the intent of allowing registration in lieu of obtaining a MAQP.

RESPONSE: The board agrees with the comments and has revised New Rule VI(3) as requested.

COMMENT NO. 16: A commentor suggested that New Rule VII(1)(a), which requires routing of certain volatile organic compound (VOC) emissions from wellhead equipment to a pipeline, appears to exclude all compressor engines from registration because all compressors are installed to move oil and/or natural gas, which could be confused with "transmission." The commentor does not believe that was the rule's intent.

RESPONSE: The board agrees that the rule was not intended to include transmission. In defining "oil or gas well facility," section 75-2-103(13)(c), MCA, states: "The term does not include equipment such as compressor engines used for

transmission of oil or natural gas." The board has revised New Rule VII(1)(a) to clarify that the term "equipment" does not include compressor engines.

COMMENT NO. 17: Several commentors expressed concerns that routing VOC emissions within one-half mile of a pipeline to the pipeline, as required under New Rule VII(1)(a), could be infeasible, and they requested that the board revise the rule to allow use of a smokeless combustion device or equivalent technology.

RESPONSE: The board agrees with the comments and has revised New Rule VII(1)(a) to allow the option of routing to a pipeline or installing add-on control equipment.

COMMENT NO. 18: Two commentors requested that the board delete New Rule VII(1)(d) and (e), requiring emission control for engines of greater than 85 brake horsepower. They stated that there is no exclusion or variance procedure for engines that may operate for short periods of time during the year and that no supporting evidence has been presented to show that catalysts can perform efficiently on small engines with horsepower down to 85 hp. They stated that, if these requirements are deleted, facility emissions still would be limited by New Rule VI(2), which limits annual emissions to less than 100 tons per year.

RESPONSE: The board has not made the suggested revision. If a facility cannot meet the requirements of New Rule VII(1)(d) and (e), then the owner or operator is required to obtain a MAQP and is subject to a case-by-case best available control technology (BACT) determination. The premise of the registration process is to develop emission controls and other requirements that could apply to a large portion of the industry, but they may not apply to every facility. The board believes that the threshold level for emission control is set appropriately based on BACT determinations made by the department for similar permitted facilities. Also, under Montana's rules, minor sources, as well as major sources, are subject to case-by-case BACT determinations, which, in most cases, limit facility emissions well below 100 tons per year.

COMMENT NO. 19: Two commentors requested that the board revise the language in New Rule IX(5) that states: "By the 25th day of each month, the owner or operator shall total the production, hours of operation, and/or fuel consumption for the previous month." They stated that, because production data is not always available within 25 days after the previous month, the board should revise the rule to allow up to 15 days after monthly production data is submitted to the MBOG.

RESPONSE: The board intended the recordkeeping requirement in proposed New Rule IX(5) as a means to monitor compliance with operating limits established through the registration process to limit emissions below the Title V Operating Permit program threshold. However, the board has determined that it is not appropriate, at this time, to allow owners and operators to establish operating limits through the registration process to stay below the Title V Operating Permit program threshold. Therefore, the board has deleted the requirement.

COMMENT NO. 20: Several commentors asked why a modeling analysis was required under New Rule IX(6) for facilities producing in the formations

identified in that rule. Some commentors stated that, because the purpose of the rule is to be certain that the ambient air quality standards for sulfur dioxide (SO_2) and hydrogen sulfide (H_2S) are protected, the board should revise the rule to protect the standards in any location but limit the required analysis to those pollutants.

RESPONSE: The board required the modeling analysis due to concerns that a facility might violate the national ambient air quality standards for SO_2 in an area that produces sour gas. Upon further review, the board agrees with the comments and has determined that an analysis is necessary for any area that produces H_2S. The board has deleted New Rule IX(6) and revised New Rule IX(4) to require an air quality analysis demonstrating compliance with ARM 17.8.210 and 17.8.214, the ambient standards for SO_2 and H_2S, regardless of a well's location, when there is a detectable level of H_2S from the well.

COMMENT NO. 21: The department commented that the board should add a definition of "VOC piping components," to clarify the components for which monthly leak inspection is required under New Rule VIII.

RESPONSE: The board agrees and has added a definition of the phrase to New Rule I(6).

COMMENT NO. 22: The department commented that the board should revise New Rule VII(1)(a) and (b), regarding emissions control, so that the "equipment" subject to control has the same meaning as used in the definition of "oil or gas well facility" in section 75-2-103(13)(b), MCA.

RESPONSE: The board agrees and has revised New Rule VII(1)(a) to make the usage of the term in the rules consistent with the language of the statute.

COMMENT NO. 23: The department commented that the board should revise New Rule VII(1)(c), regarding control of emissions from loading of hydrocarbons into transport vehicles, to require the use of control both for loading into, and unloading from, transport vehicles.

RESPONSE: The board agrees and has revised the rule as suggested.

COMMENT NO. 24: The department commented that the intent of New Rule VII(1)(d) and (e) was to require emissions control for engines of 85 brake horse power (bhp) or greater, rather than greater than 85 bhp, and the board should revise the rules to be consistent with this intent.

RESPONSE: This revision would be outside the scope of the public notice of proposed rulemaking, therefore, the board cannot make the revision in this proceeding.

Comments received after the department presented proposed revisions at the January 23, 2006, public hearing on the proposed amendments and new rules:

COMMENT NO. 25: A commentor stated that the commentor's understanding from discussions with the department was that a vapor recovery unit (VRU) would be acceptable alternative "control equipment" to meet the VOC vapor recovery requirement in Rule VII(1)(b). The commentor stated that many facilities

intend to use VRUs in lieu of routing to a pipeline or flaring, and that the investment in a VRU is substantial. The commentor stated that the board should revise New Rule VII(1)(b) to state that a vapor recovery unit has a control efficiency that is equal to, or greater than, that of a smokeless combustion device.

RESPONSE: The rule allows use of control technology that has a control efficiency equal to or greater than that of a smokeless combustion device. The board agrees that a VRU has a control efficiency equivalent to that of a smokeless combustion device. However, the board has not made the suggested revision because the board doesn't believe it's necessary to specify in the rule each type of air pollution control equipment that is equivalent to a smokeless combustion device.

COMMENT NO. 26: Commentors stated that, in New Rule IX(6), the board should either revise the rule to add an H_2S threshold at a particular stack height for the air quality modeling requirement or add language allowing use of EPA's Screen 3 model or its equivalent to meet the modeling requirement. The commentors stated that it was their understanding that the purpose of this requirement was to ensure that the ambient air quality standards for SO_2 and H_2S are not exceeded but that, under Section 1.4 of the department's modeling guidelines, modeling is not required for a permit for a minor source, and the threshold for requiring modeling is 50 tons per year (tpy) of SO_2. In nearly all cases, SO_2 emissions from wells would be less than 50 tpy, so modeling should not be required.

RESPONSE: The board agrees that modeling is not necessarily required for all facilities, and the board has revised the rule to require an "air quality analysis," rather than a "modeling analysis," to demonstrate compliance with the SO_2 NAAQS and the state's H_2S standard. There may be times that modeling will be required for this analysis, in which case the owner or operator will need to consult with the department to determine the appropriate model to be used.

COMMENT NO. 27: A commentor expressed support for eliminating the list of geologic formations, in New Rule IX(6), for which an air quality modeling analysis was required, and replacing this language with a requirement to conduct an air quality modeling analysis if any H_2S gas is found. However, the commentor stated that a numeric level for H_2S should be included in the rule. The commentor suggested that the board consider adopting a rule similar to the following rule of the MBOG:

> HYDROGEN SULFIDE GAS (1) The owner or operator of an oil or gas well drilled after the effective date of this rule that produces more than 20 MCF of gas per day containing more than 20 parts per million hydrogen sulfide must submit a hydrogen sulfide gas report to the board with Form 4 after the completion of the well.

The commentor stated that the MBOG does not require special attention until the threshold exceeds 20 ppm and that the State of North Dakota uses a 10 ppm threshold for requiring additional analysis. The commentor stated that 5ppm is readily detectable with a Sensidyne tube or Drager tube, which are hand-held devices that provide a reliable and simple method for checking for H_2S. The

commentor stated that the rule could require an air quality analysis if H_2S is detectable at levels above 5 ppm. The commentor suggested that, if none of these suggested threshold levels are acceptable, the department should undertake a modeling analysis to determine a safe threshold.

RESPONSE: The rules require only a relatively simple analysis if a detectible level of H_2S is found. As revised, this analysis does not necessarily require modeling, and the board expects the owner or operator to follow the industry norm for determining whether there is H_2S in the gas. Therefore, the board does not believe it's necessary to set a threshold H_2S level that requires an air quality analysis.

EPA, Region VIII, submitted the following comments:

COMMENT NO. 28: EPA commented that the board should revise New Rule VII(1)(d) and (e), regarding emission control for stationary engines of greater than 85 bhp, to require control for engines of greater than 35 bhp. EPA stated that it is aware of lower horsepower engines that have NO_x control. Under EPA's Oil and Gas Initiative, EPA Region 8 and the Region 8 states have specified an Existing Engines Proposal for 4-Stroke Engines to require controls on all engines greater than 35 HP. Control down to 35 bhp has been shown to be technically and economically feasible in southwest Wyoming, and Federal Land Managers for the San Juan Basin are recommending control of engines 40 bhp and greater.

RESPONSE: As discussed above, revising the threshold level for emission control is outside the scope of the public notice of proposed rulemaking and cannot be done in this rulemaking proceeding.

COMMENT NO. 29: EPA commented that the board should revise New Rule VII(1)(a) to require that any VOC vapors within a half mile of a pipeline must be routed to a gas pipeline, regardless of the Btu content of the vapors. EPA noted that the department's proposed revisions presented at the January 23, 2006, public hearing would no longer require routing VOC vapors to a pipeline. EPA also stated that there appears to be a gap in the rule between the requirement to treat VOC vapors greater 500 Btu/scf and the requirements of 40 CFR 60.18, referenced in the rule. EPA noted that 40 CFR 60.18 states that flares may be used to treat VOC vapors down to 300 Btu/scf, if steam assisted, and 200 Btu/scf, if not steam assisted. EPA stated that the rules should address this gap.

RESPONSE: The board agrees with the comment and has revised New Rule VII(1)(a) to change the level at which controls must be installed to 200 Btu/scf, which is equivalent to the requirements of 40 CFR 60.18 for nonassisted flares.

COMMENT NO. 30: EPA commented that the rules should state that facilities also need to comply with other SIP requirements, for example, state rules for minimizing fugitive emissions and opacity requirements. EPA noted that the statement in the notice of proposed rulemaking of the reason for the rulemaking stated that registered facilities still would be required to comply with any other applicable requirements not listed in the rules. However, EPA stated that, to make it clear to registered facilities, such language also should be included in the rules.

RESPONSE: The board believes that the suggested clarification is unnecessary, and the board has not made this revision. State agencies should not unnecessarily repeat rules, and a facility is obligated to comply with all applicable requirements of the Administrative Rules of Montana, Title 17, chapter 8, regardless of the location of the requirements within a specific subchapter or permit. For example, although, an air quality permit might not contain the requirement to comply with ARM 17.8.308 (the opacity limitation), or ARM 17.8.340 (a specific New Source Performance Standard), the facility still would be obligated to comply with these rules, and the department could take enforcement action for any violation.

COMMENT NO. 31: EPA noted that the department's proposed revisions presented at the January 23, 2006, public hearing included the requirement that any control equipment be operated to provide the maximum air pollution control for which it was designed, and EPA commented that this should be included in the rules.

RESPONSE: The board agrees and has revised New Rule VI(3) to include this requirement, which is intended to ensure that control equipment is operated properly.

COMMENT NO. 32: EPA commented that the rules should include a definition of the phrase "VOC piping components" used in New Rule VIII(1). EPA noted that the department's proposed revisions presented at the January 23, 2006, public hearing defined the phrase as "VOC emissions from valves, pumps, compressors, flanges, pressure relief valves, and connectors, and other piping components." EPA stated that it was not clear why "VOC piping components" would mean VOC emissions from the various pieces of equipment mentioned in the department's proposed definition.

RESPONSE: The board agrees and has added the department's proposed definition of "VOC piping components" in New Rule I(6), with minor editorial revisions.

COMMENT NO. 33: Based on review of an early, preliminary draft of the rules, EPA commented that the board should revise the rules to include a definition for "emission minimizing technology" if that phrase is used in the rules.

RESPONSE: A definition is not necessary because the phrase is not used in the rules.

COMMENT NO. 34: EPA questioned why the revisions the department proposed at the January 23, 2006, public hearing included a new reference to "potential to emit" in New Rule VI(2). EPA stated that the board's proposed new rules included a definition of "potential to emit" in New Rule I(2), but, as used in the department's proposed revisions to New Rule VI(2), "potential to emit" would have the meaning as defined in the operating permit rules at ARM 17.8.1201(26).

RESPONSE: As discussed above, the board has determined that it is not appropriate for owners or operators of facilities that have a PTE of 100 tons/year or greater to take limits through the registration process to stay below the threshold for regulation under the Title V Operating Permit program. Therefore, the board has deleted New Rule VI(2).

COMMENT NO. 35: EPA commented that the state must provide a quantitative analysis showing that the new rules will not interfere with compliance with the NAAQS or PSD increments before EPA can approve the rules as a revision to the Montana State Implementation Plan (SIP). EPA commented that section 110(l) of the Federal Clean Air Act (FCAA) states that EPA cannot approve a SIP revision that would interfere with any applicable requirement concerning attainment or reasonable further progress, as defined in section 171 of the FCAA, or any other applicable requirement of the FCAA. EPA stated that the state should complete a quantitative analysis that: (1) evaluates the cumulative impacts of the existing oil and gas well facilities; and (2) estimates the cumulative impacts of new oil and gas well facilities expected each year. EPA stated that the state must commit to evaluate the NAAQS and PSD increments in the future and that EPA would work with the department and suggest the type of quantitative analysis necessary for EPA to determine that section 110(l) of the FCAA has been met. EPA noted that the department's proposed revisions to New Rule IX(6), presented at the January 23, 2006, public hearing, would state that an owner or operator of a registration eligible oil and gas well facility, with a detectible level of H_2S from the well, shall submit, with the registration form, an air quality modeling analysis demonstrating compliance with the SO_2 and H_2S ambient air quality standards. EPA stated that the rules also should state that the owner or operator needs to demonstrate compliance with the PSD SO_2 increments. EPA commented that, if some oil and gas well facilities that emit less than 100 tpy of SO_2 may be registration eligible, the board should revise the rules to include provisions for short term SO_2 limits, to assure that the SO_2 NAAQS and PSD increments are protected.

EPA stated it understands, based on discussions with department staff, that the owner or operator of an oil or gas well facility may not register the facility, and must obtain a permit, if compliance with the SO_2 air quality standards can be assured only by installing/using control technology that is not identified in the rules but EPA stated that this is not clearly stated in the rules. EPA commented that the rules should clearly state that, if compliance with ambient air quality standards and PSD increments cannot be achieved with the controls specified in the rules, then the facility is not registration eligible.

RESPONSE: The board believes that EPA's proposed revisions would constitute a change from the current method of handling oil and gas well facilities. The registration process will impose the same operational and control requirements that are required under the permitting program. Also, the registration rules require submission of an analysis if a facility has detectable levels of H_2S emissions. The board believes that the state's SIP submittal need provide only a qualitative explanation of the change to a registration process and a discussion of the universe of emission sources subject to the new rules. The board agrees that the department should periodically review compliance with the PSD increments and the NAAQS. The board does not agree that any further requirements are necessary in the rules for an owner or operator to determine whether a facility is eligible for registration. The registration rules are applicable if the owner or operator can meet the requirements of these rules, otherwise, the exclusion from ARM Title 17, chapter 8,

subchapter 7, is not applicable and the owner or operator is required to apply for a permit.

COMMENT NO. 36: EPA commented that the board should revise New Rule VII to specify the combustion efficiency that smokeless combustion devices must achieve. EPA noted that the rule references 40 CFR 60.18 but that 40 CFR 60.18 does not include a combustion efficiency requirement for flares. EPA stated that, without a specified combustion efficiency, there appears to be a practical enforceability problem because the department's January 23, 2006, proposed revisions to New Rule VII(1)(a) would allow use of other control equipment with equal or greater control efficiency than a smokeless combustion device.

RESPONSE: The board agrees that, because a minimum level of control is being established, with operating parameters that, by EPA guidance, require a control efficiency of at least 95%, the rules also should specify a control efficiency of 95%, and the board has made this revision to New Rule VII(1)(a).

COMMENT NO. 37: EPA commented that New Rule VIII requires monthly inspections of all VOC piping components for leaks and requires repairs of such leaks within a specified period of time but that the rules should specify methods more reliable than sight, sound, and smell to detect leaks, for example, field gas chromatography, photo ionization air monitoring, or portable gas detection instrumentation.

RESPONSE: The board has not made the suggested revision. The inspection and repair requirements are meant to provide for an overall check of facility operations. The rule encourages on-going compliance by requiring an owner or operator to regularly check each facility. This level of monitoring is consistent with the requirements for other similar-sized emission sources in the state's minor source program, and additional testing/monitoring is not necessary. All facilities are required to operate control equipment with at least a 95% control efficiency, and facilities operating a flare are required to meet the requirements of 40 CFR 60.18. Also, New Rule VI(3) requires all facilities to operate their control equipment to provide the maximum control for which it was designed.

COMMENT NO. 38: EPA commented that New Rule VIII should require the owner or operator to make a first attempt at repair for VOC leaks that exceed a certain specified level, e.g., 500 ppm, and that the rule should require the owner or operator to test/monitor all control equipment, e.g., monitor for the presence of a continuous pilot flame using a thermocouple and continuous recording device, to assure that control equipment is operating correctly.

RESPONSE: The board has not made the suggested revisions. New Rule VIII(2) requires the owner or operator to make a first attempt to repair any leaking VOC equipment at any VOC level, and the sight, sound, and smell monitoring requirements, which are appropriate for these types of emission sources, would not allow the owner or operator to identify a specific level of leak.

COMMENT NO. 39: EPA and two other commentors suggested revisions to New Rule VI(2), which requires an owner or operator to limit operation so that the

facility's PTE is less than 100 tpy. The two other commentors suggested that it appears that the only way for a facility to remain below major source regulatory thresholds is through some sort of curtailment. They stated they do not believe that was the intent of the rules and suggested the following revised language: "The owner or operator of a registration eligible oil or gas well facility shall add emissions controls, limit production, hours of operation and/or fuel consumption such that the facility's potential to emit is less than 100 tons per year . . . ."

EPA commented that one of the main tenets of any rule used to limit potential to emit is that the rule must be enforceable as a practical matter. EPA stated that a January 25, 1995, memorandum entitled "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (Act)," from John S. Seitz, Director, Office of Air Quality Planning and Standards, and Robert I. Van Heuvelen, Director, Office of Regulatory Enforcement, to Regional Air Division Directors provides guidance on exclusionary or prohibitory rules. EPA stated that Attachment #4 to the memorandum mentioned above describes six enforceability criteria which a rule must meet to make limits enforceable as a practical matter. In general, practical enforceability for a source-specific permit term means that the provision must specify: (1) a technically accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, annually); and (3) the method to determine compliance, including appropriate monitoring, recordkeeping and reporting requirements. EPA stated that, for rules that apply to categories of emission sources, practical enforceability additionally requires that a rule: (4) identify the categories of sources covered by the rule; (5) where coverage is optional, provide for notice to the permitting authority of an election to be covered by the rule; and (6) recognize the enforcement consequences relevant to the rule. EPA stated that it reviewed the proposed new rules against the six criteria contained in EPA's guidance.

RESPONSE: As discussed above, after reviewing the comments received, the board has determined that the registration process is not an appropriate process, at this time, to allow an owner or operator to take a limit to stay below the Title V Operating Permit threshold. The owners and operators of the few facilities that have a PTE of 100 tons/year or greater will have to obtain either a MAQP, containing further conditions limiting PTE to less than 100 tons/year, or obtain a MAQP and a Title V Operating Permit.

Reviewed by: BOARD OF ENVIRONMENTAL REVIEW

/s/ David Rusoff
DAVID RUSOFF
Rule Reviewer

By: */s/ Joseph W. Russell*
JOSEPH W. RUSSELL, M.P.H.
Chairman

Certified to the Secretary of State, March 27, 2006.